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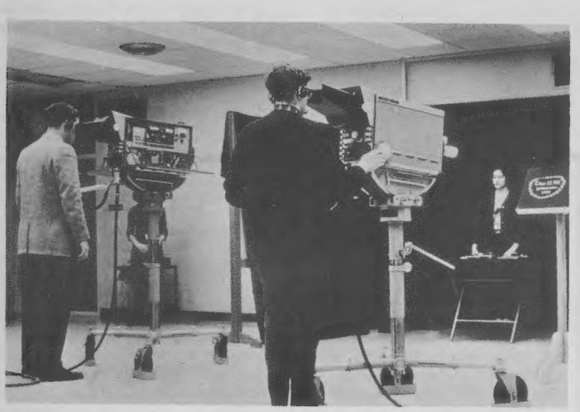
Closed-circuit T.V. — a teaching aid on campus



In the Education studio, student teachers are required to give 2-3 minute demonstrations in front of the T.V. cameras. The demonstration is monitored (below) at the control panel and recorded on video tape for student and self-evaluation.

The use of closed-circuit television as a teaching aid has been 'tried and proven' at the University of Alberta. Within the faculties of Education, Dentistry, and Medicine there is a growing trend to use T.V. as a supplement to certain courses where increasing enrolment and a relative inaccessability of certain subject material demands it.

Two areas in which closed-circuit T. V. is used to advantage are the observation or classroom area and the demonstration or studio situation.

The former is currently used only by the Faculty of Education. It involves installing three T.V. cameras in a school classroom and recording, on video-tape, material for presentation to students. The advantages of this system are many. It replaces the old system of sending out students to observe in classrooms prior to their practice teaching sessions in schools. By playing back a video-tape recording of a classroom situation where a teacher has been requested to illustrate certain teaching methods, many students in Faculty of Education classrooms can observe that tape simultaneously and follow it up with group discussions. The faculty member previews the tape and is able to elaborate on certain points during the playback. In many cases the student can see, through camera close-ups, a great deal more than if he was actually observing in the classroom. One interesting outcome of the use of these video-tape recordings is that the teacher who is actually being filmed finds playbacks a valuable means of self-evaluation. With student teaching beginning in November, October is the month when the playback equipment is in heavy demand. John Philpott, closed-circuit T.V. co-ordinator for the Faculty reports that Friday afternoons are the only times when closed-circuit T. V. is not in use.

The second use of closed-circuit T. V. at the University is for demonstrations in a studio situation. In the Faculty of Education the studio system is currently under development, but in the Faculty of Dentistry it has been used to advantage for the past three years. Here the students can observe live broadcasts from the studio with an instructor's eye-view. The big advantage of this method is the use of cameras to magnify. Eight classrooms in the Medical Sciences Building are equipped with monitors to carry the studio productions. The studio resembles a commercial T. V. studio and, like commercial T. V., a certain amount of rehearsal is required before "shooting" a production. Dr. C. W. B. McPhail, Assistant to the Dean of Dentistry, feels that the T. V. has proven its worth in many dental courses and will be of even greater value in the future when the size and number of classes increase.

Within the Faculty of Medicine, the same studio is used by the Departments of Anatomy and Psychiatry. In Anatomy, the ability of the camera to magnify the subject material is of particular significance. It has been used not only for Anatomy students, but also for the instruction of professional doctors as well, in a program carried out by Dr. E. G. Bertram, Starting in January, Dr. K. A. Yonge of Psychiatry will be using the studio two hours per day for patient interviews.

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The closed-circuit television studio in the Medical Sciences Building serves the Faculty of Dentistry and the departments of anatomy and psychiatry.

The Department of Physiology uses a different camera set-up. Students observe a demonstration in the actual demonstration room but a small camera records on three monitors, a close-up of what is going on at the same time. A distinct advantage of this method is a minimal use of animal specimens to demonstrate abnormal physiology. Dr. Charles Heath visualizes, with the acquisition of a video-tape recorder, the use of closed-circuit T. V. in hospitals to observe abnormal human physiology, especially in the fields of neuro-physiology and endocrinology.

All departments using closed-circuit T. V. indicate there is an increasing need for more video-tape equipment to expand what has become a valuable and effective method of teaching. The utilization of closed-circuit T.V. is limited generally by the imagination of the people using it, but present indications are, with the well-trained faculty members now using it, that it will develop without bounds, perhaps even to the packaging of programs for educational television and the communication arts.

Enrolment increases by more than 1,000

Enrolment figures as of October 7th indicate that in excess of 11,200 students are attending credit day classes on the Edmonton campus this winter session. Of this number, 10,723 are full-time students, an increase of more than 1,000 over last year's figures.

The faculty breakdown of full-time students is as follows:

Agriculture	259
Arts	1,554
Business Administration & Commerce	599
Dental Hygiene	38
Dentistry	193
Education	2,694
Engineering	868
Graduate Studies	1,085
Household Economics	153
Law	173
Medicine	318
Medical Laboratory Science	59
Nursing (on campus)	175
Diploma Nurses	439
Pharmacy	220
Physical Education	280
Rehabilitation Medicine	92
Science	1,305
Special Students	215
St. Stephen's College	4

These figures should not be counted as final due to probable late registrations and withdrawals.

New grading system planned for '66-67

A new grading system will be in effect at the University for the 1966-67 academic year. The major feature of the new system is that grades will be recorded on a nine-point scale and that considerable emphasis will be placed upon the verbal descriptions of the grades as they are being assigned. Grades will be awarded on the following basis:

GRADE POINT	VERBAL DESCRIPTION
9	Outstanding
8	First Class
7	Very Good
6	Good
5	Pass
4	Low Pass
3	Conditional
2	Supplemental
1	Fail

Although improvements on the percent grading system currently in use have been under consideration for many years by General Faculty Council, it was only last spring that the new system was adopted. It will still take a good deal of time and effort to iron out certain details of the system so that it can be implemented smoothly next year.

Among the reasons given by University personnel for adoption of the 9-point system are: (a) it removes the unrealistic impression of exactness inherent in the percent system; (b) the use of the verbal grade makes the assigned grade more meaningful and certainly less misleading than is the case for marks assigned under the current system; (c) the new system should help standardize the grades awarded in different disciplines, and (d) the 9-point system represents a considerable simplification over the present practice.

THE BLADEN COMMISSION REPORT ON HIGHER EDUCATION

The long-awaited Bladen Report on the financing of higher education has now been made public. It is the result of an 18-month study by a Commission appointed in April, 1964 by the Canadian Universities Foundation, the predecessor organization to the Association of Universities and Colleges of Canada. Members of the Commission were Vincent W. Bladen, Dean of Arts and Science at the University of Toronto; Louis-Paul Dugal, Deputy Director of the Science Secretariat of the Privy Council; the Hon. M. Wallace McCutcheon, Senator; and Howard I. Ross, Chancellor of McGill University.

In the Commission's terms, the purpose of the Report is "to help the people and governments of Canada to face up to the financial problems of University development over the next decade." Dr. G.C. Andrew, Executive Director of the A. U. C. C. recently stated that "for many years universities made their financial needs known to the public only at times of crisis, and even then there was no adequate explanation of how crucial it was to see that the needs were met. If Canada was to benefit fully from its enormous intellectual resources, it had to see that its universities were adequately supported. Since the universities are in the best position to study their own needs, this Commission was set up with a view to presenting the public with a complete explanation of future needs. The Report is the first comprehensive analysis of the immediate and future needs of Canadian universities."

The Commission's financial estimates are stated as follows in the Report:

UNIVERSITY EXPENDITURES, 1960-61 to 1975-76

	1960-61	1964-65	1970-71	1975-76
Enrolment	113,900	178,200	340,400	461,000
Operating cost/student	1,546	1,891	2,713	3,633
		Millions of dollars		
Operating Expenditure	176	337	924	1,675
Capital Expenditure	79	200	390	357
Total University Expenditure	225	537	1,314	2,032

The major share of this bill, the Commission says, will have to be met by governments.

GOVERNMENT EXPENDITURES ON UNIVERSITIES AND STUDENT AID, 1964-65 to 1975-76

Millions of dollars

	1964-65	1970-71	1975-76
Operating Expenditure	202	647	1,173
Capital Expenditure	133	312	286
Student Aid	20	153	245
Total	355	1,112	1,704

On student aid, the Commission feels students will require far more aid than is presently available. In the Commission's view, the increased support would be better directed to where it is most needed by a program of increased bursary and loan aid rather than by abolition of tuition fees.

"We recommend, says the Commission, that those who can afford to pay a substantial part of the cost and that all who benefit, should bear some part of the total cost of their education. The less the state must raise for the program of university expansion, the more likely is the full implementation of that program." They recommend that there be no general increase in fees without assurance of a simultaneous increase in student aid. These are the methods by which the Commission seeks "to provide enough places in well equipped high quality universities for qualified students free from financial worry."

The following are some of the major recommendations contained in the Report:

Recommendations to Federal Government

1. That the present per capita grants be raised to $5 for the year 1965-66, and be increased by $1 each year thereafter until such time as the discussions with the provinces lead to an appropriate revision of the amount of these grants.
That they continue to be paid to the universities that are at present eligible for such grants and to such others as may become recognized as eligible by the Association of Universities and Colleges of Canada, subject always to the special arrangements at present existing with the Province of Quebec.

2. That a Capital Grant Fund be established into which be paid each year $5 per head of the Canadian population.
That the total amount available to the universities in any province be the same proportion of the total Fund as the population of that province is of the Canadian population.

3. That the federal responsibility for financing research be recognized by a great increase in the grants for research to the universities, to their staff members and to their research students, specifically.
That the amounts available from the National Research Council for the support of research in universities, including the supplement referred to below, be increased to $40 million for the year 1966-67 and be escalated by 20 per cent each year thereafter.
That the amounts available from the Medical Research Council for the support of research in the universities, including the supplement referred to below, be increased to $20 million for the year 1966-67 and be escalated by 20 per cent each year thereafter.
That the amounts available for research in the social sciences and humanities from the Canada Council, including the supplement referred to below, be increased to $15 million for the year 1966-67 and be escalated by 20 per cent each year thereafter, and that $2 million of this be distributed as grants to university libraries for the development of their research collections.

4. That the following proposals of the Hall Commission on education in the health field be implemented. (1) The establishment of a Capital Fund for the expansion of existing facilities and the development of new facilities for medicine, dentistry, and nursing. (2) The establishment of a Capital Fund to finance the construction of teaching hospitals with proper facilities for clinical research.

5. That the present income tax relief to parents of students attending universities be revised to provide more adequate relief for the lower income groups.

Recommendations to Provincial Governments

1. That they adopt some method of determining university operating and capital grants as will permit more rational forward planning by the universities. Specifically we recommend that all provinces that have not as yet established a "Grants Commission" do so; and that in all such Commissions there be strong academic representation. The function of the Commission would be to advise the government on the aggregate needs of the universities, capital and operating, and to divide among the universities the total amount in fact voted by the province.
Further, that all provinces give serious thought to the advantage of determining the annual operating grant to the number of students in various categories weighted in accordance with the different cost per student in such categories, and that they recognize that the special needs of the emergent universities require some special provision beyond that prescribed by a formula devised for the established universities.
Determination of the "weights" to be used in the formula for different categories of students should be the responsibility of the Commission as would the determination of the special additional grants to emergent universities.

2. That for the next decade, having in mind the magnitude of the expenditures and for the sake of social justice, they resist the popular pressure for the abolition of fees, and that they make their grants to the universities on the assumption that fees at about the present level will continue to be charged.

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SABBATICAL LEAVE REGULATIONS

As approved by the Board of Governors, Oct. 1st

The University recognizes the potential benefits to the faculty member and the University of leaves intended for study, research, writing, travel, or other such unsalaried work, of a nature that will better fit the faculty member to carry out his academic duties on his return. The University regulations on sabbatical leave are as follows:

(i) A faculty member is eligible for sabbatical leave after serving six years on the full-time teaching staff, or after serving for six years following a previous period of leave for which financial assistance was provided by the University. Full-time academic service at another institution may be accepted to a maximum of two years of the total qualifying period of six years.

(ii) Sabbatical leave is not granted automatically. It is awarded by Deans' Council which considers whether satisfactory arrangements can be made to carry on the work of the Department, and whether the program planned will be to the mutual advantage of the faculty member and the University. Within this framework, leave will be granted to the most deserving applicants up to the limit of the number of leaves made available each year -- currently up to a maximum of 5% of the full-time teaching staff.

(iii) While sabbatical leaves are not primarily intended to permit a faculty member to qualify for an advanced degree, it is permissible to secure credits in advanced courses.

(iv) Normally, sabbatical leaves will be tenable away from the home campus, but consideration will be given to programs involving work to be done at this University.

(v) The leave normally consists of twelve months, but applications will be considered for shorter periods such as one-half year. Although leave usually begins on July 1, other starting dates may be considered.

(vi) While on sabbatical leave, the faculty member will normally receive four-fifths of his basic University salary at the time of his going. He may receive outside assistance in the form of grants or scholarships, but may not accept work for which he will be paid a salary.

If the sum of the outside assistance and the sabbatical salary, less legitimate travelling expenses, exceeds the current University salary of the faculty member, then the sabbatical salary will be reduced to maintain the total figure at the basic University salary.

(vii) The granting of sabbatical leave will not interfere with salary increments which are recommended for the faculty member, and if he so desires, he may continue to participate in the University staff benefits. Details of these arrangements can be secured from the Business Office of the University.

(viii) The faculty member, after completion of his sabbatical leave, is expected to prepare a report on his activities during his leave for submission to the President through his Dean.

(ix) The faculty member must give an undertaking that he will return to the service of the University for two years on completion of the leave period or, alternatively, refund the salary paid him during the leave on the basis of one-twenty-fourth of the salary paid him during the leave for each month of the two-year term not yet served.

(x) Applications for sabbatical leave are made through the Head of a Department to the Dean of the Faculty who will place them before the Deans' Council for decision and report to the Board of Governors. The details of the program planned for the leave must be submitted with the applications. December 15 is the final date for filing applications with the Deans' Council for sabbatical leaves commencing the following year.

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That they leave the universities free to establish their own fee structures; that they give no more support per student to the universities that charge lower fees nor less to those that charge higher fees.
That there should be no general increase in fees without assurance of a simultaneous increase in student aid.
That there be no difference in the fees charged to students resident in the province and to those coming from outside.

3. That they develop an adequate system of undergraduate student aid for residents of the province, and that the aid given be tenable in any approved university in any province or in any country.
That the amount that any student will receive be easily calculated in advance by the intending student, and that for this purpose it be based on a simple formula.

Recommendations to universities

1. That they recognize the need for co-ordination and co-operation between universities in the interest of economy and efficiency, and that they take the initiative in presenting such plans to their provincial governments.
2. That they recognize the importance of exploring all methods of reducing cost which are not inimical to academic quality; that they continue to pursue excellence without extravagance.

Recommendations to Corporate Bodies

That private donors, while continuing to help with the provision of the basic requirements, be particularly concerned to provide for experimental ventures for the enrichment of the normal university program."

Faculty Notes

genetics

L. P. V. JOHNSON

Beginning November 1, DR. L.V.P. JOHNSON, Professor of Genetics, will spend an 18-months' leave of absence in East Pakistan. He has been appointed program specialist for the Ford Foundation's South and Southeast Asia program.

Dr. Johnson's major responsibility will be to advise the foundation's representatives on the development of a support program to the Rice Research Institute at Dacca, in East Pakistan. Initial studies by the institute suggest that Pakistan could develop varieties with higher genetic ceilings which could, within five years, significantly increase production of a crop whose output in East Pakistan during 1963-64 was valued at 1.2 billion dollars. Dr. Johnson will also work closely with the International Rice Research Institute in the Philippines and will spend part of his time with them.

Ten years ago Dr. Johnson was on a similar mission in Syria for the Food and Agricultural Organization.

education

At the annual meeting of the Canadian Education Association this fall held in Fredericton, N. B., DR. H. T. COUTTS, Dean of Education, was elected President of that association for one year. He has just completed a term as Vice-President.

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In the fall of 1966, an international program for educational personnel in English-speaking countries will begin. The program will be designed to formally prepare education administrators in countries outside the United States and Canada. Through an inter-visitation program, opportunities will be afforded both to education visitors and to American and Canadian professors to broaden their perspective concerning educational leadership development and to gain a better understanding of specific approaches to education. The program will be sponsored by the University Council for Educational Administration and will be facilitated by the W. K. Kellogg Foundation grant of $40,000.

The only Canadian involved in the planning phase of the program is DR. A.W. REEVES, Professor and Head of Educational Administration. He is one of a committee composed of persons from participating nations who have shown marked interest in facilitating the international exchange of educational ideas about improved educational leadership.

medicine

W.C. MacKENZIE

McGill University honored this University's Dean of Medicine by presenting him with the honorary doctor of laws degree at a special Founders' Day Convocation on October 7th. This is the fourth outstanding honour bestowed on DR. W. C. MacKENZIE over the past two years. He was elected President of the Royal College of Physicians and Surgeons of Canada in January, 1964, was awarded the University of Minnesota's Outstanding Achievement Award in the following summer and, in June of this year was given Honorary Fellowship in the Royal College of Surgeons of Edinburgh.

romance languages

"Marivaux" is the title of the 368-page volume just released by the University of Toronto Press and written by DR. E. J. H. GREENE, Head of the Department of Romance Languages. The book is a critical study of Marivaux's writings, showing the development of Marivaux's thinking and the intimate relationship among the plays, novels, and essays of any given period. Dr. Greene's work will be valuable to all students of the 18th C. in France and for directors planning to produce the plays of Marivaux.

physical education

M. L. VAN VLIET

DR. M. L. VAN VLIET, Dean of the Faculty of Physical Education is editor of a book just released by Prentice-Hall called "Physical Education In Canada." It is the first published work to examine the entire physical field as it stands in Canada and to project into the future, the philosophies and policies now being developed with a national level of achievement as the goal.

Twenty leaders in the field of physical education in Canada have contributed to the publication including DR. W.D. SMITH and DR. M. L. HOWELL of the Faculty of Physical Education.

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Dr. Van Vliet and Dr. Howell are also co-authors of a recently published study by the Department of National Health and Welfare called "Physical Education and Recreation in Europe." Their findings are a result of a two-month study tour undertaken by both professors during the summer of 1963 when they examined physical education and research programs and recreational and athletic facilities in Yugoslavia, Sweden, Denmark, Germany, England, and the U.S.S.R.

appointments, etc.

At a meeting of the University Board of Governor's Executive Committee on September 30, 1965, the following full-time appointments, resignations, and leaves of absence were approved. Not included in this list are re-appointments, sessional appointments, and appointments without definite term.

APPOINTMENTS:

ARTS: R. J. Middleditch, Secretary of the Faculty, effective October 1/65.

ATHABASCA HALL: J. Fraser Smith, Warden, effective Sept. 1/65.

BIOCHEMISTRY: W. A. Green, Assistant Professor, effective Sept. 1/65.

EDUCATIONAL PSYCHOLOGY: R.P. McDonald, Associate Professor, effective Nov. 1/65.

ELECTRICAL ENGINEERING: V. Gourishankar, Associate Professor, Sept. 1, 1965.

GENETICS: D. Nash, Assistant Professor, effective Nov. 1/65.

LIBRARY: Mrs. S. Rooney, Librarian, effective Sept. 15/65; Miss Siew-Pun Yee, General Librarian - Circulation, effective Sept. 1/65.

MATHEMATICS: R.B. Saxena, Postdoctoral Fellow and Lecturer, effective Sept. 1/65.

MECHANICAL ENGINEERING: J. S. Kennedy, Acting Administrative Head, effective Sept. 1/65.

MINING & METALLURGY: J. Fehling, Associate Professor, effective Oct. 1, 1965.

PEMBINA HALL: Mrs. J.G. Sparling, Warden, effective Sept. 1/65

PHYSICS: D. Venkatesan, Visiting Associate Professor, effective Sept. 1/65.

PSYCHOLOGY: N.M. Ginsburg, Associate Professor, effective Sept. 1/66; V.S. Nilsson, Assistant to Acting Head, effective Sept. 1/65.

RESIGNATIONS

EDUCATIONAL PSYCHOLOGY: L.E. Pass, Assistant Professor, effective Aug. 31/65.

ELECTRICAL ENGINEERING: T. Van Nguyen, Assistant Professor, effective Aug. 31/65.

COMMERCE: J.G. Johns, Assistant Professor, effective Aug. 31/65.

GENETICS: Mrs. L. Frances Miller, effective Aug. 31/65.

LIBRARY: Miss Laurel L. Ball, Professional Librarian, effective Aug. 31/65.

MATHEMATICS: B. S. Chwe, Assistant Professor, effective Aug. 31/65.

MEDICINE: A. S. Little, Associate Professor, effective Aug. 31/65.

NURSING: Miss Frances Sikora, Lecturer, effective Aug. 31/65.

PSYCHIATRY: W. Forster, Associate Professor, effective Oct. 31/65.

SURGERY: W.A. Strutz, Instructor, effective July 31/65.

LEAVE OF ABSENCE

DENTISTRY: R. C. McClelland, Assistant Professor, effective Sept. 1/65.

calendar of events, october 16th to 31st

Oct. 16 - Formal dining at the Faculty Club, 6 - 9 p.m., followed by dancing 'till midnight.

Oct. 18 - Canadian premier showing of works by English artist, Michael Ayrton, Fine Arts Gallery, 9021 - 112 Street, 7 - 9 p.m., Monday through Friday until Oct. 29.

Oct. 22 - T.G.I.F. Night at the Faculty Club, 4 - 6 p.m., followed by Chinese supper (garlic spareribs and fried rice).

Commerce Rodeo, Ice Arena, 6:30 and 9:30 p.m., saddle bronc riding, bareback riding, brahma bull riding, steer decorating, calf roping, and ladies' barrel racing. Tickets at Mike's Newstand and the Students' Union Office.

Oct. 23 - Football Game: University of Manitoba Bisons versus U of A Golden Bears on campus (or at Clarke Stadium if the University bleachers are not ready) at 2:00 p.m. Rush seats.

Formal dining at the Faculty Club, 6 - 9 p.m., followed by dancing 'till midnight.

Oct. 27 - National Student Day: The Political Science Club in conjunction with a faculty committee will sponsor a "Teach-In" beginning at 2 p.m. in Convocation Hall. The first panel composed of Premier E. C. Manning, the Editor of the Edmonton Journal, the University Chancellor, a student, and a faculty member, will discuss "The Role of the University in the Community." Further panels will follow throughout the day on "The Economics of Education: the feasability of free education," "Education and the Political Parties," "The Climate of Intellectual Thought in Canada."

Oct. 29 - Harlem Stars Basketball Game against the University Senior Team, Main Gymnasium, 8:00 p.m.

T.G.I.F. Night at the Faculty Club, 4 - 6 p.m., followed by Western-style supper (swiss steak and onion rings).

Oct. 30 - W.C.I.A.A. Cross Country Championships, Kinsmen Park, 1:00 p.m.

Harlem Stars versus the U of A Senior Team, Main Gymnasium, 8:00 p.m.

Formal dining at the Faculty Club, 6 - 9 p.m., followed by dancing 'till midnight.

Canada: Laboratory of World Problems

BLAIR FRASER

Mr. Blair Fraser, Ottawa Editor of Maclean's Magazine, delivered the 1965 Henry Marshall Tory Lecture Oct. 12th. The following are excerpts from his speech entitled "Canada: Laboratory of World Problems."

"In suggesting that Canada is or could be a laboratory of twentieth century problems I mean that we have a number of the gravest of our time, but on a relatively small scale -- pilot-plant or laboratory scale. It is within our capacity to experiment, in ways that might be impossible for nations that face them on a larger scale, or whose physical or financial resources to cope with them are less adequate than ours. It is to two such problems in particular that I would like to direct your attention.

One we might call the problem of loyalty. It is the problem of inducing an effective sense of nationhood among citizens who, not only individually but in substantial and self-contained communities, have grown up in different ways of life, different habits of thought expressed in different languages.

We Canadians often talk as if this problem were peculiar to us, almost unique. In fact the very opposite is closer to the truth. The problem is very nearly universal. Only a minority of the nations of the world have not got it in one form or another. Many of them have it far more acutely, and with far graver overtones of violence and hatred, than we in Canada have ever had.

I believe Canada can perform a useful service of experiment and example here, as Switzerland has done on its even smaller scale. This is one problem which, we know, is not insoluble. We know this because it has already been solved right here in Canada, not yet on a national scale but on a scale which could and should, and in my opinion soon will, become national.

The area within Canada where we have been able to continue a satisfactory solution to this problem is, of course, the Province of Quebec. The fact is that within the Province of Quebec, the English-speaking minority enjoys and has always enjoyed, as a matter of course, full control of its own affairs as a lingual community.

In a bilingual or multi-lingual nation the majority must always resist the temptation to use the language as an instrument of coercion.

Because we know they (difficulties) can be overcome we shall overcome them, and in doing so we shall learn the answers to some good questions: How much does it cost to set up a bilingual school system? What administrative services can best be shared, and what kept separate? When and how do you start teaching the other language, especially if the other is the majority language and you want the children to be all bilingual? If Canada could make herself able to answer such questions as these, from fresh experience, we might well find no form of technical assistance more useful to new nations where the problem of loyalty is deep and acute.

The other problem I'd like to discuss, for which I believe Canada could be a laboratory, is also related to citizenship but is otherwise very different. For lack of a better term I have called it the problem of apartheid.

The problem is how, and on what terms, to bring into the twentieth century primitive peoples whose own culture is approximately that of the New Stone Age. Technically they have no relevance to modern methods of production; in purely material terms they are useless. The skills and special knowledge they comprise have no commercial value. Indeed, the special knowledge itself is usually wrong, in fact, a legacy of misinformation.

We know enough already to know that this is not a material problem. The simple provision of food and shelter won't do. . . . The problem is to maintain or to restore self-respect in the individual, and cohesion in the society of which he feels himself to be a member.

We have in this country several primitive communities whose numbers I wouldn't even guess at -- because they don't, of course, include all the indigenous people of Canada, probably not even most of them. . . . I'm speaking of those small but substantial communities of forest Indians, of hunting and fishing Eskimo, who cannot quite be said to live as their forefathers did (that's no longer possible) but who at any rate have not yet devised any other way to live.

Though we have spared no expense on teaching the children of these primitive communities, we've given little thought and no research to the problem of what to teach them. . . . I believe we have had enough experience already to know that the effect of this well-meant effort is disastrous.

There are very few countries in which this unsolved problem, so desperately urgent for so many other nations, can be found in such manageable dimensions -- physically and financially manageable, I mean. We can afford to try things and see if they work.

And if we were to launch on a program of bold experiment here, I suspect we might find it produced some new knowledge that we would find useful in other fields. . . . If we were to make a bold attack on the problem of the primitive society, we might find ourselves advancing on the problem of the depressed area too. Certainly we would find ourselves able to be more useful as purveyors of foreign aid and technical assistance, because this problem that we have on a laboratory scale, other nations have in the dimensions of national disaster."